



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/716,672

11/20/2003

Gaku Harada

8013-1155-1

7405

466 7590 07/09/2008
YOUNG & THOMPSON
209 Madison Street
Suite 500
ALEXANDRIA, VA 22314

EXAMINER

LEE, CYNTHIA K

ART UNIT

PAPER NUMBER

1795

NOTIFICATION DATE

DELIVERY MODE

07/09/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

embon@young-thompson.com



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/716,672
Filing Date: November 20, 2003
Appellant(s): HARADA ET AL.

Robert Madsen
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 5/7/2008 appealing from the Office action mailed 11/01/2007.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

JP 61-206170	Hirai et. al.	09-1986
US 4740436	Kobayashi	04-1988

US 6110563	Pienimaa	04-2000
US 4992559	Kathirgamanathan	02-1991

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

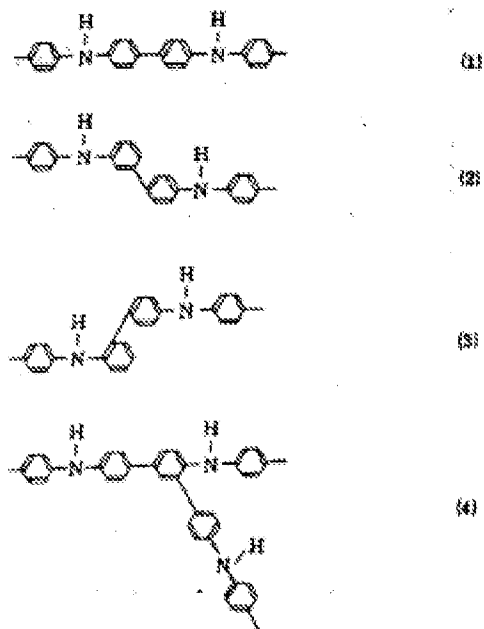
A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1,4-6,11-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Hirai et al. (JP 61-206170).

With respect to claims 1,6,11-13,15, Hirai et al. teach the polymerization or copolymerization of diphenyl amine or triphenyl amine and their derivatives as the electrode material in a battery. The general formulae of the conductive polymer are listed as follows.

Art Unit: 1795



With respect to claims 1,4,5,14, Hirai et al. teach the polymer is doped with perchloric acid (ClO_4^-). See page 353.

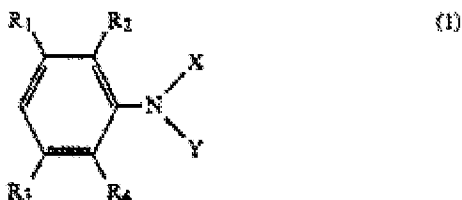
Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1,4-6,11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi et al. (US 4,740,436).

Kobayashi et al. disclose a non-aqueous secondary battery comprising a polymer of aniline derivative as a positive electrode. A monomer of the form



where X and Y independently represent a hydrogen atom or a phenyl group. The polymer is formed as a film and during the polymerization process is doped with acid, such as HCl. See Column 5, Lines 1-25. Furthermore, Kobayashi et al. list diphenylamine as a "typical example" of a monomer of their invention, and teach both homopolymers and copolymers are encompassed by their disclosure. Thus, one of ordinary skill in the art would recognize poly(diphenylamine) as one of a relatively small number of polymers intended to be encompassed by the Kobayashi et al. invention. Kobayashi et al. suggest that the polymers of their invention should be complexed (doped) with a protonic acid. Preferred anions of the protonic acid used for the complexing are Cl^- , BF_4^- and ClO_4^- . Thus, Kobayashi et al. teach doping or complexing polybiphenylamine.

6. Claims 7,8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirai et al. (JP 61-206170) as applied to claims 1, 4-6,11-15 and, further in view of Pienimaa et al. (US 6,110,563).

Hirai et al. disclose a conductive polymer as described above in paragraph 3. However, Hirai et al. do not teach the conductive polymer can be used as an

Art Unit: 1795

electromagnetic shielding material. Pienimaa et al. teach an electromagnetic shielding is prepared using a conductive polymer such as polyaniline. See Column 2, Lines 1-5. Therefore, it would have been obvious to one of ordinary skill in the art to use polybiphenylaniline polymer as the electromagnetic shielding material, because Pienimaa et al. teach the use of a conductive polymer film as the EMI shielding material.

7. Claims 9,10,16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirai et al. (JP 61-206170) as applied to claims 1, 4-6,11-15 and, further in view of Kathirgamanathan et al. (US 4,992,559).

Hirai et al. disclose a conductive polymer as described above in paragraph 3. However, Hirai et al. do not teach the conductive polymer can be used as in other devices. Kathirgamanathan et al. teach an the electroconductive polymer can have many uses, including EMI/RF shielding material, in electrochromic display systems, ant-static material, as ion and pH sensors and as battery electrode material. See Abstract. Therefore, it would have been obvious to one of ordinary skill in the art to use polybiphenylaniline polymer as the conductive polymer in various devices, because one of ordinary skill in the art would recognize that conductive polymer can be used in various applications as stated in the Kathirgamanathan reference.

8. Claims 7,8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi et al. (US 4,740,436) as applied to claims 1,4-6,11-15 and, further in view of Pienimaa et al. (US 6,110,563).

Kobayashi et al. disclose a conductive polymer as described above in paragraph 5. However, Kobayashi et al. do not teach the conductive polymer can be used as an electromagnetic shielding material. Pienimaa et al. teach an electromagnetic shielding is prepared using a conductive polymer such as polyaniline. See Column 2, Lines 1-5. Therefore, it would have been obvious to one of ordinary skill in the art to use polybiphenylaniline polymer as the electromagnetic shielding material, because Pienimaa et al. teach the use of a conductive polymer film as the EMI shielding material.

9. Claims 9,10,16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi et al. (US 4,740,436) as applied to claims 1,4-6,11-15 and, further in view of Kathirgamanathan et al. (US 4,992,559).

Kobayashi et al. disclose a conductive polymer as described above in paragraph 5. However, Kobayashi et al. do not teach the conductive polymer can be used as in other devices. Kathirgamanathan et al. teach an the electroconductive polymer can have many uses, including EMI/RF shielding material, in electrochromic display systems, ant-static material, as ion and pH sensors and as battery electrode material. See Abstract. Therefore, it would have been obvious to one of ordinary skill in the art to use polybiphenylaniline polymer as the conductive polymer in various devices, because one of ordinary skill in the art would recognize that conductive polymer can be used in various applications as stated in the Kathirgamanathan reference.

(10) Response to Argument

Addressing Argument I of Hirai, Applicant asserts that Hirai is directed to the dimer of diphenyl amine, and not a polymer.

Refer to pg 11, as well as claim 1, of the translation of Hirai as provided.

Addressing Argument II of Hirai, Applicant asserts that Hirai does not disclose a doped polybiphenylaniline.

Refer to the 1st full par. on pg 13 and 2nd full par. on pg 15 of Hirai.

Addressing Argument III of Hirai, Applicant asserts that Hirai's Abstract and the underlying Japanese document differ in the features disclosed.

Applicant has not provided specific arguments as to how the abstract and the underlying document differ. Regarding the Applicant's arguments on the reliance of solely the abstract of Hirai, MPEP 2128 states that

An electronic publication, like any publication, may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art. See MPEP § 2121.01 and § 2123. Note, however, that if an electronic document which is the abstract of a patent or printed publication is relied upon in a rejection under 35 U.S.C. 102 or 103, only the text of the abstract (and not the underlying document) may be relied upon to support the rejection. In situations where the electronic version and the published paper version of the same or a corresponding patent or printed publication differ appreciably, each may need to be cited and relied upon as independent references based on what they disclose. (emphasis added)

Further, MPEP 706.02 states that

In limited circumstances, it may be appropriate for the examiner to make a rejection in a non-final Office action based in whole or in part on the abstract only without relying on the full text document. (emphasis added).

Nowhere does the MPEP state that the Examiner is required to submit a translation of the full document for the Applicant to consider in order to reply to the rejections stated in the Office Action.

Further, the Examiner disagrees that the Applicant had not been given an opportunity to fully respond to the Office Action because the document Hirai was cited **by the Applicant** on an Information Disclosure Statement submitted on 11/20/2003. The Examiner concludes that the Applicant had knowledge of the content of the JP document Hirai before submitting the IDS. It is unclear to the Examiner as to why the Applicants did not know the content of Hirai particularly when the Applicants claim foreign priority to an application in the **same language**.

Addressing arguments regarding Kobayashi:

Applicant asserts that Kobayashi discloses diphenylamine, but not polybiphenylaniline (emphasis in original). Kabayashi discloses that a polymer of aniline is used. See abstract and 2:30-32.

Art Unit: 1795

Applicant asserts that Kobayashi fails to recognize the superior results obtained by a polymer based on biphenylaniline that is doped with a dopant as claimed.

It is unclear to the Examiner as to what the superior results the Applicants are referring to in independent claims 1 and 4.

In any case, findings of an additional advantage associated with doing what the prior art suggests does not lend patentability to an otherwise unpatentable invention. See *In re Linter*, 458, F.2d 1013, 173 USPQ 560 (CCPA 1972) and *In re Dillon*, 919 F.2d 688, 16 USPQ2d 1897 (Fed. Cir. 1990). See MPEP 2145. Further, the fact that applicant has recognized another advantage which would flow naturally from the following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

Applicant asserts that the present application compares the performance of the present invention with the polyaniline of Kobayashi, and thus the present invention has superior performance over Kobayashi.

The Examiner remains unpersuaded because Kobayashi not only discloses polyaniline, but polybiphenylaniline. As disclosed in Kobayashi column 2, formula (1) discloses a phenyl group and "Y" also represents a phenyl group. Kobayashi 2:30 states that a polymerization of formula (1) is obtained.

Thus, Kobayashi discloses polybiphenylaniline.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Cynthia Lee/

Patent Examiner

Art Unit 1795

Conferees:

/PATRICK RYAN/

Supervisory Patent Examiner, Art Unit 1795

/Dah-Wei D. Yuan/

Supervisory Patent Examiner, Art Unit 1795